

## **Towards an analytical framework for understanding the development of a quality assurance system in an international joint programme**

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# **Towards an analytical framework for understanding the development of a quality assurance system in an international joint programme**

## **Abstract**

This paper intends to construct an analytical framework for understanding quality assurance in international joint programmes and to test it in a case analysis of a European-Chinese joint doctoral degree programme. The development of a quality assurance system for an international joint programme is understood as an institutionalization process of an organizational innovation, and the institutionalization process is also interpreted as a process of reconciling different institutional logics in the institutional changes. Based on these understandings, in the paper we construct an analytical framework by combining insights on conceptions of quality, the institutional logics perspective, and organizational innovation studies. The framework constructed aims mainly to tackle two issues: first, changes in multiple institutional logics underlying the quality assurance system, and second, factors facilitating/impeding the logics changes in the institutionalization process.

In the empirical analysis, we take an international joint doctoral programme between a Chinese university and a Portuguese university as an example to analyse the initiation and implementation of a quality assurance system in the programme. While developing a system accommodating the traditions and needs of both sides is not an easy task, we found that several factors, namely profitability, compatibility and the agency of institutional entrepreneurs, may facilitate the process.

**Keywords:** quality assurance, Europe, China, Portugal, doctoral education, international joint programme, organizational innovation, institutional logics

## Introduction

Developing international joint programmes is one important strategy to develop and enhance collaborative partnerships between higher education institutions (HEIs). Based on a literature review (Aerden and Reczulska 2013; Knight 2008; Kuder, Lemmens and Obst, 2013), we define an international joint programme (also called international collaborative degree programme), as a programme that is coordinated and offered jointly by different HEIs and/or research institutes from different countries leading to a (single or joint or double/multiple or combined) degree. International joint programmes 'are built on the principles of international academic collaboration and can bring important benefits to individuals, institutions and national and regional education systems' (Knight 2011, 299). While the benefits of international joint programmes are many and varied (Knight 2008), quality assurance (QA) is recognized as a significant challenge to tackle in organizing international joint programmes (Aerden and Reczulska 2013; Knight 2008; Tauch, Rauhvargers, and European University Association 2002). By definition, 'Quality assurance is about ensuring that there are mechanisms, procedures and processes in place to ensure that the desired quality, however defined and measured, is delivered' (Harvey and Green 1993, 19). However, so-far the research focus in analysing international joint programmes has been mainly on classifying the relevant concepts or mapping the practices (Aerden and Reczulska 2010, 2013; Knight 2008, 2011; Kuder and others 2013; Michael and Balraj 2003; Obst and Kuder 2009; Tauch, Rauhvargers, and European University Association 2002; Waterval et al. 2015). There has been only little research focusing on enhancing theoretical understandings of QA of international joint programmes, and this has impeded the development of research on and practices of QA in international joint programmes.

Meanwhile, with the launch of the EU-China Comprehensive Strategic Partnership in 2003, the collaborative partnership between Europe and China in higher education (HE) enters into a massive development stage (Cai 2013). Against this background, both Europe and China have

articulated their firm intention to develop European-Chinese collaborative partnership in the field of doctoral education (EUCNDOC 2016). By 2016, six international joint doctoral programmes were established due to the joint effort of European and Chinese HEIs and approved by the Chinese government (Ministry of Education of China 2016). Quality remains a key issue for stakeholders in Europe and China to address in the joint provision of doctoral education. In contrast to the increasing popularity of European-Chinese joint doctoral programmes, there is little research on the QA of such programmes. It is even rare to see QA studies of cross-border education provision in general (QACHE 2016; Stella 2006; Stella and Bhushan 2011; Zwanikken et al. 2013). We consider that one barrier constraining the development of this research area is the lack of pertinent theoretical or analytical frameworks for understanding the QA of international joint programmes.

Therefore, to bridge the knowledge gaps mentioned above, we raise two research questions in this paper: (1) how can the initiation and implementation of a QA system in an international joint programme be conceptualized in an analytical framework? (2) How can such a framework be applied and tested for analysing the development of a QA system in a European-Chinese joint doctoral programme? In line with this thinking, this paper consists of two parts: analytical framework construction and empirical case analysis. Through these two research questions, we endeavour to address three key issues, namely the nature of the development of QA in international joint programmes, the complexity of the QA system, and factors facilitating/impeding the QA system's development.

## **Analytical framework**

### ***Conceptions of quality in HE***

To develop a framework for understanding QA in international joint programmes, we start with the concept of quality, as actors' shared conceptions of quality determine their judgement and choice of QA approaches.

It is difficult to define quality in HE, as quality is an ‘elusive’ (Green 1994, 22) and ambiguous concept (Harvey and Knight 1996). It has ‘been defined with different perspectives and orientations, according to the person, the measures applied and the context within which it is considered’ (Sahney, Banwet, and Karunes 2004). What has nevertheless been commonly cited is a classic definition of quality in HE developed by Harvey and Green’s (1993), in which five categories of the conceptions of quality are distinguished and described as follows:

- (1) Quality as exception: A traditional concept of quality in relation to the concept of ‘excellence’, including three notions: 1) the traditional notion of quality as distinctive, 2) a view of quality as embodied in excellence, 3) a weaker notion of exceptional quality, as passing a set of required/minimum standards.
- (2) Quality as perfection: A concept concentrating on process. The concept of perfection is related to the ideas of zero defects and getting things right first time. It is bound up with the notion of a quality culture, which refers to one in which everyone in the organization, not just the quality controller, is responsible for quality.
- (3) Quality as fitness for purpose (FFP): Quality is judged by the extent to which a product or service meets its stated purpose. The purpose may be (1) FFP1: customers’ specifications, defined by customers, or (2) FFP2: institution’s mission, defined by institutions or external professional body.
- (4) Quality as value for money: Quality is equated with level of specification and related to cost. This notion assesses quality by return on investment or expenditure.
- (5) Quality as transformation: A notion seeing quality as a transformative process, which in HE adds value to students through their learning experiences.

Srikanthan and Dalrymple (2003) argued that Harvey and Green’s fifth interpretation of quality, quality as ‘transformation’ is a meta-quality concept, which subsumes the other ones, thus being excluded in their categorization. Actually Harvey and Knight (1996) also maintained that the

other four concepts of quality are rather possible operationalizations of transformative processes than ends in themselves. Thus, in our categorization of conceptions of quality we only consider the first four categories of quality defined by Harvey and Green (1993).

In addition, Harvey and Green's (1993) understandings of quality entails two orientations: 'outcome orientation' and 'process orientation'. Quality is either concerned with outcome, the final product/service, or the process of producing these (Harvey and Green 1993; Sahney, Banwet, and Karunes 2004).

### ***Quality of HE from the perspective of institutional logics***

We believe each conception of quality is associated with certain institutional logics, and hence the aforementioned concepts of quality can be understood from that perspective. Institutional logic is defined as 'a set of material practices and symbolic constructions' that constitute an institutional order's 'organizing principle' and are 'available to organizations and individuals to elaborate' (Friedland and Alford 1991, 248). The primary motivations for institutionalists to develop the institutional logics approach are twofold (Cai and Mehari 2015): one is to use institutional logics to concretely define the content and meaning of institutions (Thornton and Ocasio 2008); the other is to better explain the process of institutional changes (Thornton, Ocasio, and Lounsbury 2012). Such a perspective sees institutionalization as a process of reconciling different or even competing institutional logics and draws particular attention to institutional compatibility and the role of agency in the process of institutional changes. Hence, it is particularly useful for understanding the development of a QA system in a joint programme offered by HEIs from different contexts and traditions.

Thornton, Ocasio and Lounsbury (2012) proposed a typology of seven ideal types of logics at societal level, including logics of state, market, family, profession, religion, community and corporation. While the concept of institutional logics was originally developed for a better understanding the institutional contexts of our societies (Alford and Friedland 1985; Friedland and

Alford 1991), these logics can also be available at the level of organizational field (Greenwood et al. 2011) and organizations (Cai and Zheng 2016).

Next we relate the categorization of the conceptions of quality (Harvey and Green 1993) to outcome/process-orientation and the typology of institutional logics (Thornton, Ocasio, and Lounsbury 2012) as shown in Table 1.

Table 1. Concepts of quality in HE: Aligning approaches and logics

Concepts	Key notions of the definition	Outcome/process –orientation	Underlying logics
Exception	(1) Traditional notion of quality: distinctiveness (2) Exceeding high standards (excellence 1) (3) Checking standards	Outcome-orientation	Profession logic
Value for money	(1) Accountability (2) Customer's charter		Market logic
Fitness for purpose (FFP)	(1) FFP1: customer specification (2) FFP2: institution mission		Market logic and bureaucratic state logic
Perfection (consistency)	(1) Zero defects (excellence 2) (2) Getting things right first time (3) Quality culture	Process-orientation	Democracy logic and corporation logic

To facilitate the understanding of the table, we first describe the definition of the relevant logics that have been mentioned:

- (1) **Profession logic:** Profession is understood as a relational network on the basis of actors' personal expertise, and following profession logic, organizations/actors seek to enhance its

status and reputation by increasing personal expertise (Thornton, Ocasio, and Lounsbury 2012).

- (2) **Market logic:** Actors in a society of market logic are like shareholders in a free market. Following market logic, actors act to pursue their own profits and interests, and emphasize efficiency in gaining return on investment (Thornton, Ocasio, and Lounsbury 2012).
- (3) **Corporation logic:** Actors in a society of corporation logic becomes employees under the control of corporate managers (Blau and Scott 2003). Following corporation logic, all employees are expected to conduct standardized corporate practices (Thornton, Ocasio, and Lounsbury 2012). Similar to market logic, corporation logic also emphasizes efficiency, but its focus is on efficiency in managerial practices (Thornton, Ocasio, and Lounsbury 2012).
- (4) **Bureaucratic state logic and democratic logic,** are two variants of a logic of state, which is understood as a redistribution mechanism (Thornton, Ocasio, and Lounsbury 2012). Friedland and Alford (1991) distinguish between bureaucratic state logic and democracy logic. Following bureaucratic state logic, actors attempt to convert diverse individual situations into a basis for routine official decisions that can be made by consensus (Friedland and Alford 1991). Moreover, bureaucratic state logic entails rationalization and the regulation of human activities by legal and bureaucratic hierarchies (Friedland and Alford 1991). Following democracy logic, actors attempt to convert diverse issues into decisions that can be made by majority vote.

Next we elaborate the alignment between conceptions of quality and institutional logics in Table 1.

- (1) Quality as exception is aligned with profession logic. ‘Exception’ entails an elitist view of high quality in a product or service in terms of its reputation (Harvey and Green 1993), which reflects a profession logic. The notion rests on the idea of ‘providing a product or



service that is distinctive and special' (Green 1994, 13), in which sense, its perception of quality is outcome oriented.

- (2) Quality as value for money is aligned with logic of market. Harvey and Knight (1996) perceive 'value for money' as a 'market view of quality' (7). This notion sees education as a commodity available at a price (Harvey and Green 1993), which is a reflection of market logic. The notion also stresses return on investment or expenditure (Harvey and Green 1993), thus naturally revealing its outcome orientation.
- (3) Quality as fitness for purpose reflects market logic and bureaucratic state logic. First, fitness for customers' specifications (FFP1) is concerned with satisfying customers' various needs, and encourages the pursuit of market niche and competition (Harvey and Knight 1996). In this sense, it indicates a logic of market. Second, similar to FFP1, fitness for institutions' mission (FFP2) indicates a logic of market, as the notion subsumes fitness for 'the market as perceived by the institution' (Harvey and Green 1993, 19) and stresses efficiency in resource utilization to fulfil an institution's mission (Green 1994; Sahney, Banwet, and Karunes 2004). However, in contrast to FFP1, besides market logic, FFP2 also indicates a logic of bureaucratic state, as FFP2 encourages external QA approaches, which are usually related to government policies or mandates and the redistribution of the HE budget (Harvey and Knight 1996). In either FFP1 or FFP2, quality is judged by the extent to which a product or service eventually meets its stated purpose, clearly reflecting an outcome-orientation.
- (4) Quality as perfection is aligned with democracy logic and corporation logic. The concept stresses standard managerial behaviours in the quality management process, which reflects a logic of corporation. Further, quality culture, a bounded concept of this notion, entails a logic of democracy, by emphasising 'democratising quality by making everyone involved in a product or process responsible for quality at each stage' (Harvey and Knight 1996, 16).

The notion focuses on the process of producing products/services, which is naturally a process-orientation.

Although the four concepts are associated with different logics and different orientations, they are not mutually exclusive (Harvey and Knight 1996). In practice, people may switch from one perspective/approach to another without being conscious of any conflicts (Harvey and Green 1993, 28).

***The QA system in an international joint programme as an organizational innovation***

We consider a QA system in an international joint programme as an organizational innovation, which is defined as ‘any departure from the traditional practices of an organization’ (Levine 1980, 4), on the grounds that the QA system in an international joint programme has departed from any QA systems in the partner organizations. Since there may be different understandings (and underlying logics) of quality between educational providers in an international joint programme, the institutionalization process is also a process of reconciling different and even competing institutional logics.

An organizational innovation goes through four stages in its institutionalization process: Stage 1, recognition of need for change; Stage 2, planning and formulating a solution to satisfy the recognized need; Stage 3, implementation of a plan as a trial-and-error process; Stage 4, institutionalization or termination (Levine 1980). Correspondingly, we distinguish four phases in the development of a QA system in an international joint programme, as follows:

- (1) Preparation phase, from Innovation Stage 1 (Recognition of needs for change) to Stage 2 (Planning and formulating a solution), when the actors identify the need for a QA system and plan for its establishment.
- (2) Initiation phase, the beginning of Innovation Stage 3 (Implementation), the initial moment when the actors establish the QA system.

- (3) Implementation phase, the later part of Innovation Stage 3 (Implementation). This phase begins immediately after the QA system is established and lasts until the QA system becomes institutionalized or is terminated.
- (4) Institutionalization/Termination phase, when the innovation has been institutionalized/terminated.

Levine (1980) also suggested that the extent to which an innovation is institutionalized depends on two factors, namely profitability and compatibility. Profitability is about how an innovation satisfies the needs of the host organization (called general profitability) or the needs of the individual members or sub-groups within the hosts (called self-interest profitability) (Levine 1980). The higher level of profitability perceived either by the hosts or their sub-groups, the more likely it is that the innovation will be institutionalized. Compatibility refers to ‘the degree to which the norms, values, and goals of an innovation are congruent with those of the host’ (Levine 1980, 17). While it is expected that higher degree of compatibility leads to greater extent of institutionalization of the innovation, the innovation by reason of departing from traditional practices often challenges the traditional norms and values of the host organization (Levine 1980).

Cai and co-authors (Cai, Zhang, and Pinheiro 2015; Cai et al. 2016) further improved Levine’s conceptualization by using the insights of institutional theory. First, they enhanced Levin’s concept of institutionalization of innovation by explicitly using the definition of institutionalization by Selznick (1957, 16); institutionalization is an inherently historical process:

*It is something that happens to an organization over time, reflecting the organization’s own distinctive history, the people who’ve been in it, the groups it embodies and the vested interests it has created, and the way it has adapted to its environment.*

Second, by criticising Levine for only looking at institutional compatibility from an intra-organizational perspective (Cai, Zhang, and Pinheiro 2015), they draw attention to the external dimension of compatibility because the survival of an organization depends largely on how it conforms to external social legitimacy (Meyer and Rowan 1977). More importantly, they add agency as a key factor affecting the institutionalization of an innovation (Cai et al. 2016). Agency

refers to the actions conducted by institutional entrepreneurs (Battilana, Leca, and Boxenbaum 2009), who have the resources and interest to implement institutional changes (Thornton and Ocasio 2008), to change the existing institutional orders/logics in order to facilitate innovation. Agency can affect the institutional changes by exerting influence on the actors' focus of attention (Cai and Liu 2015).

Therefore, profitability, compatibility and agency are three key influential factors in developing the QA system. More specifically, in the context of international joint programmes, the profitability of the QA system refers to both the economic and non-economic benefits available for the joint programme (general profitability) and partner institutions (self-profitability), for example, the prestige and growth of the programme and its partner institutions, efficiency of management, improvement of quality of the programme, etc. Compatibility refers to the congruence of values, goals and norms of the different partner institutions in the QA system of the joint programme (intra-organizational compatibility), as well as the congruence of values, goals and norms of the joint programme with those of partner institutions (external compatibility). Agency in this case refers to actions for developing a QA system that are undertaken by those programme coordinators with the resources and interest and also involvement in the development of the QA system. The key programme coordinators are the institutional entrepreneurs of the QA system. We refer to them here as 'QA coordinators'.

The theoretical propositions mentioned above are illustrated in Figure 1, which includes a few key elements, namely the stages of institutionalization of a QA system as an organizational innovation, (mingling) institutional logics associated with each stage of the institutionalization process, and factors affecting the institutionalization process.

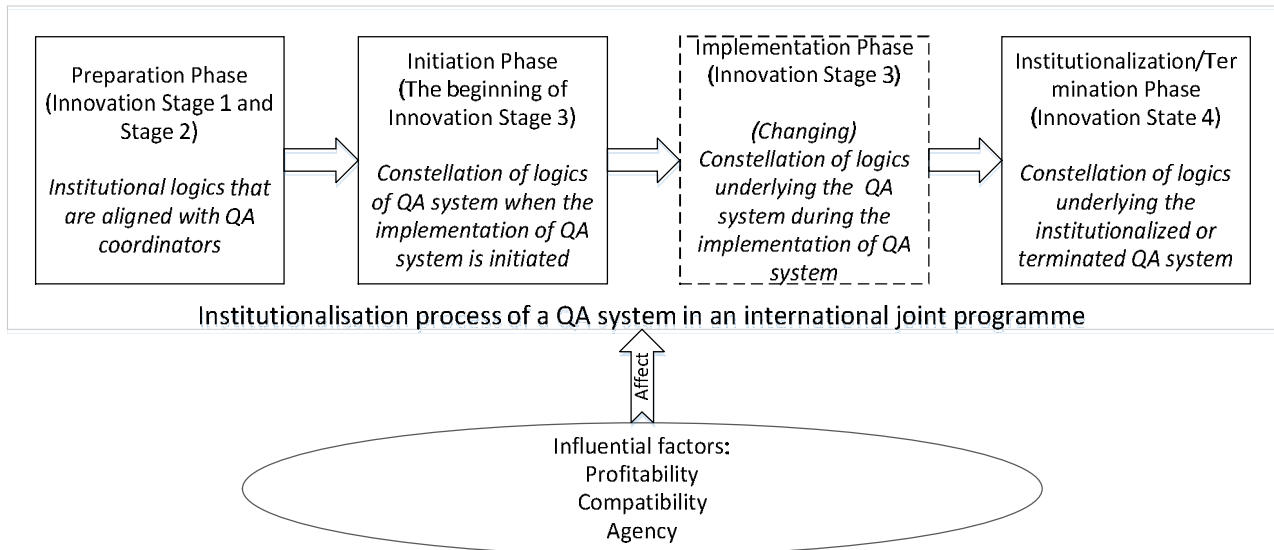


Figure 1. Institutionalization process of a QA system in an international joint programme

When applying the analytical framework to understand QA system development in an international joint programme, answers are sought to the following questions:

- How did the key QA coordinators in the case articulate their conceptions of quality? And what are the underlying logics and approach-orientation?
- What is the constellation of the institutional logic in the Initiation Phase? How has the QA system been initiated?
- What changes in institutional logics have occurred since the Initiation Phase? How has the QA system been adjusted during the Implementation Phase?
- How have the influential factors, namely profitability, compatibility and agency, affected the institutionalization process of the QA system?

### Empirical case analysis

For our empirical study, we choose the Doctoral Programme of Management in Health-care (DMH), an international joint programme between the Southern Medical University of China (SMU) and the ISCTE-University Institute of Lisbon (ISCTE-IUL). We evince two reasons for this

choice: First, it is an international joint programme, which is suitable for us to test the analytical framework. Second, it is a representative case of a European-Chinese joint doctoral programme, which can enhance our scholarly understanding of European-Chinese joint doctoral programmes. This case programme reflects the main characteristics of existing European-Chinese joint doctoral programmes: (1) Most of them are in the fields of business administration and management; (2) the education is provided in China and the students are Chinese; (3) in the majority of the programmes, graduates receive European partner institution's degrees on graduation; (4) most European partner institutions are from Southern Europe.

The DHM programme was established on the basis of the partner institutions' common interests. SMU is one of the leading medical universities in China, which has trained numerous medical professionals for the country. In recent years, SMU has recognized the growing need to provide high-quality professional education for senior managers in the healthcare industry to cope with the healthcare reform in China. ISCTE-IUL is a public Portuguese university with near 30 years' experience of co-operating with Chinese universities. It is extremely interested in bringing its relevant expertise to bear in the Chinese healthcare reform. In light of common interests, the programme was first established and approved by the Ministry of Education of China (MoE) for student recruitment for a two-year trial in 2010. In 2012, the DMH programme passed the MoE's accreditation and began to recruit students nation-wide. Currently the programme enrolls 20-25 Chinese students per year. Successful graduates will receive their doctoral degrees from ISCTE-IUL.

The empirical fieldwork was carried out from September 2014 to May 2015 through the authors' visits to the field. The empirical data were collected by classroom observation, participation in thesis seminars and student-supervisor meetings, interviews with key QA coordinators and supervisors, and informal communication with students and administrators in the programme. In this case, two academic directors of the programme (A1, B1), one administrative

director (A2) and one programme coordinator responsible for the QA of students' theses (B2) are identified as the key QA coordinators. We managed to talk to all of them, three (A1, A2 and B1) by interview, and one (B2), as a co-author of the article, who participated in the study and shared his experiences of the development of the programme. Table 2 summarizes the case study participants' information.

Table 2 Participants' information

No.	Interviewee	Role of interviewees	Method of data collection	Date of data collection
1	A1	QA coordinator; academic director of the DHM programme, dean of School of Humanity and Management in the SMU	Interview	17.09.2014
2	A2	QA coordinator; administrative director of the DMH programme and head of the International Affairs Office in the School of Humanity and Management in the SMU	Interview	17.05.2015 and 19.05.2015
3	B1	QA coordinator; professor, academic director of China's programmes in the ISCTE-IUL	Pair interview (together with B3)	15.04.2015
4	B2	QA coordinator; programme coordinator who is responsible for the QA of students' theses in	Co-authoring	-

the ISCTE-IUL

5	B3	Senior professor from the ISCTE-IUL	Pair interview (together with B1)	15.04.2015
6	B4	Supervisor and lecturer	Interview	17.05.2015
7	B5	Supervisor and lecturer	Interview	17.05.2015
8	A3	Administrator, deputy head of the International Affairs Office	Informal communication	17- 19.05.2015
9	A4	Administrator in the International Affairs Office	Informal communication	17- 19.05.2015
10	S1	Programme student	Informal communication	17- 19.05.2015
11	S2	Programme student	Informal communication	17- 19.05.2015
12	S3	Programme student	Informal communication	17- 19.05.2015

We coded and analysed the collected data on the basis of our theoretical interpretation and the analytical framework proposed above, with an assistance of Nvivo software. Next, based our data analysis, we will directly respond to the aforementioned four questions.

***How did the key QA coordinators in the case articulate their conceptions of quality? And what are the underlying logics and approach-orientation?***

Our data analysis reveals that the four key QA coordinators in the case, namely A1, A2, B1, B2, understood quality in the case programme in different ways. There are even differences between coordinators from the same institutions, and their perceptions reflect the corresponding institutional logics and orientation of QA approaches (see Figure 2).



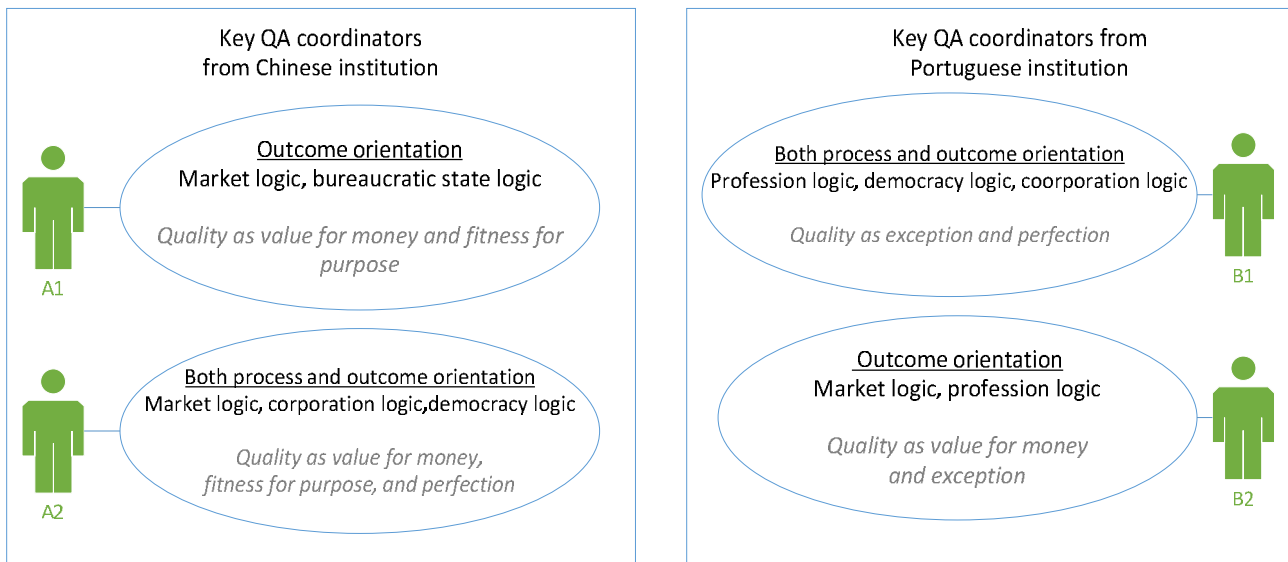


Figure 2. Logics and approaches orientation as articulated by the key QA coordinators of the case programme

First, we look at the Chinese QA coordinators. The Chinese QA coordinators' perceptions of quality of the case programme reflected a mixture of logics of market, bureaucratic state, corporation and democracy, but to varying extents. They also had different views regarding outcome or process orientation in QA.

For instance, A1's perceptions entailed a mixture of market logic and bureaucratic state logic. In our interview, A1 clearly linked quality to the concept of 'value for money', and believed that the education provided in the case programme would provide students with what they pay for. This indicates a market logic. Further, A1 supported the view of quality as fitness for the institution's mission (FFP2), and stressed the significance of the external accreditation of the case programme, which was associated with the Chinese government regulation and entailed a bureaucratic state logic. In addition, A1 highlighted the importance of learning outcome and the result of programme accreditation, which explicitly reflected his outcome orientation regarding QA.

The perceptions of A1 were to a large extent shared by A2, hence A2's perceptions also reflected market logic and bureaucratic state logic. A2 contended that the network provided in the

case programme itself was indeed what students pay for, which may be taken as an expression of quality as value for money and reveals a logic of market. Further, A2 saw quality as fitness for customers' specifications (FFP1) as she maintained that the purpose of her job was to satisfy and coordinate students' and supervisors' needs. The emphasis on FFP1 and the value of the programme as an affordable commodity revealed A2's outcome orientation regarding QA. But A2's approaches are not solely outcome-oriented. She also saw quality as perfection concerning process, which entailed the logic of corporation and democracy. For example, her claim that QA should be a standardized process revealed a logic of corporation. Further, she demonstrated a democracy logic by stressing the quality culture. She maintained that the key to the success of this programme is that everyone feels responsible for quality and is involved in the process.

To some extent, the Portuguese QA coordinators articulated some perceptions of the quality of the case programme similar to those of the Chinese QA co-ordinators. These included seeing it as value for money and perfection, but they differed in seeing quality as exception. Their perceptions were underpinned by a mixture of logics of profession, democracy, cooperation and market. However, there were also differences between the Portuguese QA coordinators (B1, B2), in terms of aligning logics as well as in QA approaches orientation.

For instance, B1's perceptions were driven by the logics of profession, corporation, and democracy. B1 stressed the importance of meeting the academic standard in ISCTE-IUL. It demonstrated her view of quality as exception, and entails a logic of profession. On the other hand, B1 believed that QA is relevant to the standardized process and perceived quality as perfection. Her assertion of giving structure to the QA process demonstrated her support for standardized process management and reflected a logic of corporation. She stressed quality culture, which was underlined by a democracy logic. For instance, she stated that 'we grow with these students, not only the supervisors, including myself, the academic director, administrative director. So everybody is taking care of each student in particular'. Similar to A2, B1 associated QA with both outcome

and process. For instance, her statements, such as ‘because we give the degrees, we must control the quality’, explicitly manifested her outcome orientation to QA, but meanwhile her emphasis on standard process management revealed her process orientation.

Similar to B1, B2’s perception also entailed a logic of profession. B2 emphasized that students should follow the academic rules and standards of ISCTE-IUL, which reveals his perception of quality as meeting a specific standard. He also held an elitist view of quality and often associated quality with a programme’s reputation. His perceptions in this respect reveal a clear profession logic. However, in contrast to B1, B2’s perceptions also reflect a logic of market. Driven by market logic, he implies that the quality of the case programme is the added value for students’ investment. He even explicitly supported the idea of introducing market logic into the QA system of the case programme. All his perceptions, such as meeting a certain standard, reputation, and added value of investment in learning, all indicate an outcome orientation to QA.

Thus the logics and approaches to QA as articulated by A1, A2, B1, B2, differs from person to person, although there are some commonalities. In general, we can conclude that market logic, corporation logic and democracy logic existed in both institutions. Moreover, outcome and process orientation to QA were also apparent. With the establishment of the QA system in the case programme, these different logics and approaches in orientations were introduced or reinforced in the QA system. Next we will describe the establishment of the QA system and the initial constellation of the logics of the system.

***What is the constellation of the institutional logic at the Initiation Phase? How has the QA system been initiated?***

Soon after the establishment of the case programme, the QA coordinators identified a need for a new QA system tailored for the programme for the following reasons: (1) the existing QA systems at partner institutions cannot comply with the national policies and institutional regulations on both sides, nor can they reflect mutual understandings and acceptance. (2) Both institutions needed to

accommodate the new stakeholders, the students and staff members in the case programme, who are different from those in their home institutions. (3) There was also a need for a new QA system to overcome practical problems in administration and ensure efficient management. (4) Professional education in the field of management called for a new QA programme. Given the increasing demand in China for professional education in the field of management, competition in China's education market is fierce. The QA coordinators in the case programme believed that the quality of the programme is the key to success in this competitive market. For the QA coordinators, a new QA system that addressed all the needs mentioned above was needed, but no such system was available in either institution.

To satisfy the need for a new QA system, a QA team consisting mainly of the four key QA coordinators was established in the case programme. The QA team drew up a plan for the QA system and soon implemented it. In so doing, the logics of QA behind coordinators' articulated conceptions, mentioned in Section 3.1, came to form the initial constellation of logics of the QA system at Initiation Phase (see Figure 3). There may be some other institutional logics in the institutional environment of the QA system, stemming from the institutional environment of the programme or introduced into the QA system by other actors. However, as the QA coordinators were the institutional entrepreneurs in the QA system with the main resources, and were also those who took the leading role in developing the QA system, we believe that the institutional logics in keeping with their conceptions had the most significant impact on the development of the QA system.

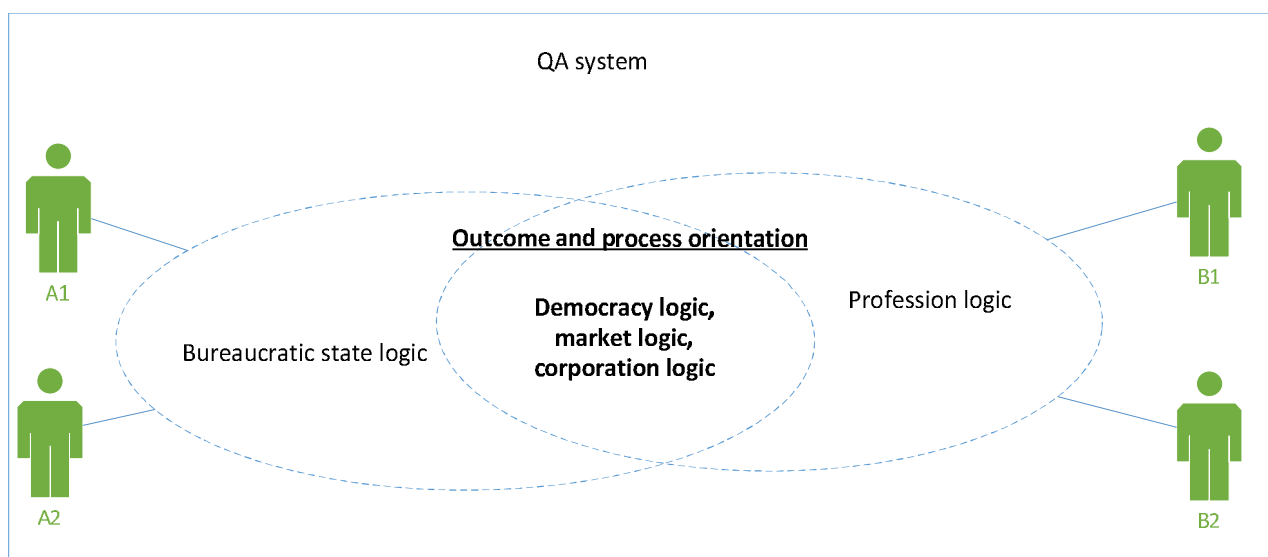


Figure 3. Underlying logics of the QA system at the Initiation Phase

As Figure 3 shows, democracy logic, corporation logic and market logic, as the common logics accepted by both institutions, dominated the QA system in the Initiation Phase. Other logics, bureaucratic state logic from Chinese QA coordinators and profession logic from Portuguese QA coordinators, affected different aspects of the QA system. Both outcome and process orientation in approaches to QA were adopted in the QA system. Driven by this constellation of institutional logics and approach-orientations to QA, several QA approaches have been implemented in the case programme.

First, driven by a logic of democracy, efforts have been made to enhance democratic participation. For instance, a special programme office in SMU was established to be a ‘hub’ to connect different stakeholders. Meanwhile, a Chinese office was established in ISCTE-IUL. In addition, a QA coordinator from ISCTE-IUL, namely B1, was appointed to SMU as the representative coordinator of ISCTE-IUL, and worked constantly with Chinese stakeholders.

Second, motivated by a logic of corporation, A2 and B1 tried to improve the efficiency of management and standardize the managerial practices in the QA process by adopting corporate practices. For instance, personnel training, such as administrators’ training and supervisors’ training, was the main tool to standardize actors’ QA approaches in the case.

Along with the reinforcement of corporation logic and democracy logic, process-oriented QA approaches were implemented. A2's and B1's approaches of widening of stakeholder participation and standardizing managerial practices were all intended to be implemented in the QA process. For instance, B1 maintained that she endeavoured to involve supervisors and students in the QA process.

Third, motivated by a market logic, the Chinese QA coordinators made full use of their personal networks and applied a 'Star Student Strategy' to open the programme's market in China. Strategically they enrolled all well-known professionals in the healthcare industry in the region as their first and second cohorts of students. These students became star students to attract more students to the programme later. Also, through these students, the programme gradually attained its market position. Further, following the logic of market, the Chinese QA coordinators also tried to identify the diverse needs of their customers (mainly students), and to communicate proactively with students to meet students' needs.

Fourth, bureaucratic state logic and profession logic, on the part of the Chinese QA coordinators and Portuguese QA coordinators influenced the respective approaches to QA coordinators. Guided by bureaucratic state logic, the Chinese QA coordinators took full responsibility for conducting routine administrative practices and getting approval for the external quality accreditation of the programme in China.

Meanwhile, driven by a profession logic, the Portuguese QA coordinators tried to ensure that students met the academic standards of the programme. The academic standard for the programme mainly followed that of ISCTE-IUL, including graduation criteria, thesis requirements, and supervision and lecturing requirements, which were described in a programme handbook. Besides a double-supervisor approach, one local Chinese professor and one Portuguese supervisor were designated in the Initiation Phase to ensure full utilization of the expertise available in the two institutions.

Outcome-oriented QA approaches were implemented along with the enforcement of market logic, bureaucratic state logic and profession logic. The approaches mentioned above, such as getting approval in the external accreditation, increasing student numbers, enhancing the programme's market position and ensuring that students met the academic standards of ISCTE-IUL, all manifest QA coordinators' emphasis on study outcomes.

In the Initiation Phase, the development of the QA system was guided by the constellation of logics of market, democracy, corporation, bureaucratic state and profession. Nevertheless, this constellation of logics was not yet completely integrated. Common logics that were widely accepted by both sides affected the QA system by mutual enforcement from both institutions. The logics that were not widely accepted affected the QA system in some particular aspects where the logics were accepted. In both cases, the process and outcome orientation of QA approached were adopted.

***What are the changes in institutional logics since the Initiation Phase? How has the QA system been adjusted during the Implementation Phase?***

Given that the completion of one cohort's studies required at least four years, the implementation of the QA system took years and was an on-going continuous improvement process. In the last five years the constellation of institutional logics in the Initiation Phase have further interacted and become reconciled with each other, gradually becoming an integrated constellation of logics (See Figure 4).

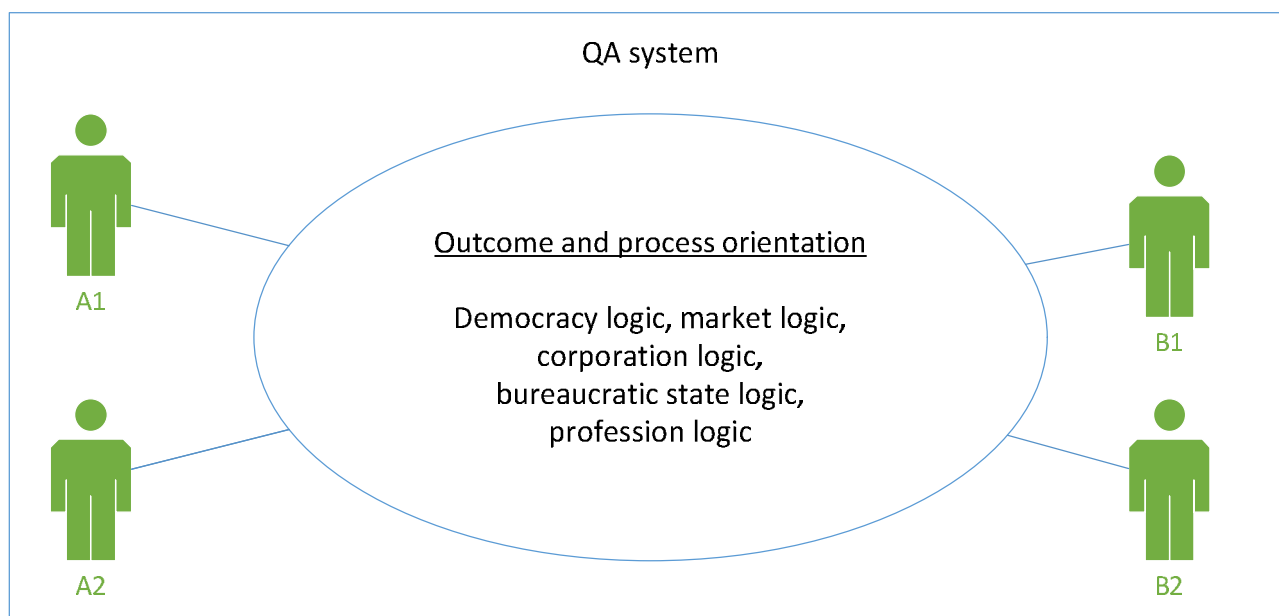


Figure 4 Institutional logics of the current QA system

Even so, the democracy logic, corporation logic, market logic remained the dominant logics, and had a significant impact on the development of the QA system: (1) under the impact of democracy logic, a quality culture was embraced and developed in the programme. B1 suggested that because of the strong quality culture, the quality control in the programme was much stricter than that in their home institutions. (2) With the support of corporation logic, a standardized QA process management was adopted and reinforced in the last five years. In the process of standardization, the programme management handbooks were written and continuously improved. (3) Driven by market logic, the QA coordinators tried to attract more students from diverse backgrounds and to enhance the market position of the programme. The range of target students for the programme was changed from provincial to national, from the healthcare industry to the healthcare sector and its related areas.

In addition, the dominant logics competed and interacted with profession logic and influenced the modification of academic requirements and standards of the programme: (1) our data



showed that democracy logic reconciled with profession logic and changed the supervision mode in the programme. As a result, the supervision for doctoral students in the programme changed from the traditional relationship involving only supervisors and students, to a new supervision mode, involving supervisors, students, programme coordinators, administrators and translators/interpreters. (2) Profession logic was also influenced by corporation logic, which led to the standardization of the thesis supervision process. A checklist system for monitoring thesis process was established, following which students and supervisors were required to complete a certain task at each checkpoint and this was monitored by the programme coordinators, instead of relying solely on supervisors' and students' own communication and interaction. 3) Along with the interaction of market logic with profession logic, the curriculum and supervision policy on the programme were adjusted to satisfy students' needs. The dual supervisor policy was adjusted to be a double supervisor approach together with sole ISCTE-IUL supervisor approach.

Unfortunately, the interaction of bureaucratic state logic with other logics was not so noticeable in the last five years. Nevertheless, driven by bureaucratic state logic, the QA coordinators stressed the government's accreditation and adjusted the QA system according to the external evaluation results every two years.

The underlying institutional logics of the QA programme have been in a state of dynamic change for the last five years, which has led to the development of the programme QA system. Next we will continue to explore why the QA system developed in such a direction.

***How have the influential factors, namely profitability, compatibility and agency, affected the institutionalization process of the QA system?***

Our data analysis confirmed our theoretical assumption that profitability, compatibility and agency are three possible influential factors that affect the institutionalization process of the QA system:

Our case analysis indicates that when different logics are in competition, if an institutional logic's impact can lead to higher profitability, the logic will therefore remain/become dominant. For

instance, in our case, the market logic remained dominant in the QA system, mainly because the impacts, such as revising the recruitment policy to attract students from diverse background and enhancing market position and reputation of the programme, have increased the benefits for the case programme. Profitability enhancement is an effective factor for guiding the development of a QA system as it strikes at the heart of what those involved in innovation really care about - the ability of the innovation to satisfy the needs of the organization and innovation itself.

Our data analysis also showed that in the institutionalization process of the QA system, institutional logics change towards higher compatibility of the QA system. In our case, democracy logic and corporation logic were found to dominate the QA system, because they can reinforce and enhance the compatibility of the QA system with the programme and home institutions. For instance, following democracy logic, quality culture was well developed in the case. It encouraged stakeholders in the programme to communicate and collaborate for QA, and established a common value and goal for stakeholders in the QA system. It also enhanced the mutual understanding and culture acceptance of different stakeholders. The same applies to the standardization of the QA process, which was a reflection of corporation logic. Driven by corporation logic, the stakeholders followed standardized practices in the QA process, which minimized conflicts of behaviours in the QA system and enabled the norms and values of actors in the QA system to be more congruent. Compatibility enhancement is an effective mechanism for transforming institutional logics as it can enable institutional logics to become more congruent with or even dominant in the institutional environment.

Agency is the third key influential factor. In our case, various QA approaches (agency) were implemented by the QA coordinators (A1, A2, B1, B2) and affected the changes in institutional logics in the QA system. For example, democracy logic and corporation logic were reinforced by A1's efforts to develop a quality culture and standard process management, such as organizing supervisors' training, leading managers' meetings and offering students consultancy services.

Because these actions drew other actors' attention to democracy logic and corporation logic, they to some extent influenced other actors' behaviours directly. Agency is one key mechanism for changes in institutional logics. It can affect the changes in institutional logics by influencing other actors' attention and actions.

## **Discussions and Conclusion**

This study contributes to the existing body of knowledge by developing an analytical framework for understanding the institutionalization process of a QA system in an international joint programme and applying it to a European-Chinese joint doctoral programme. In so doing, we largely rely on institutional theory, particularly the institutional logics perspective. We also relied on the theory of organization innovation and the literature of quality in HE.

By applying the analytical framework to a concrete case, this paper is also an initial attempt to conduct an empirical study on QA in European-Chinese joint doctoral programmes, specifically the development of a QA system in a Portuguese-Chinese joint doctoral programme. The QA system in the case was institutionalized in keeping with the changes in institutional logics. In the last five years, logics of market, corporation and democracy in the QA system remained dominant and reinforced quality culture, standard process management and marketing approaches in the programme. The dominant logics also enacted the impacts of other logics and resulted in changes in certain aspects of the QA system. Changes in institutional logics in the QA system are affected by the QA system's profitability, its compatibility and the agency of key institutional entrepreneurs (i.e. QA coordinators). Besides, contrary to our common perception that democracy logic is usually weak in Chinese society, our study indicates that democracy logic is consonant with Chinese QA coordinators' conceptions and actions. This may imply that even though democracy logic is weak in the Chinese social and political sphere, it may have a stronger foothold in academia.

Although the empirical case analysis has to some extent verified the usefulness of the analytical framework, increasing the theoretical understanding of a QA system in an international joint programme requires more empirical studies.

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